**Product Data Sheet**

### Chemical Properties

**Product Name:** BRL 37344, sodium salt  
**Cas No.:** 127299-93-8  
**M.Wt:** 385.82  
**Formula:** C19H21NO4ClNa  
**Chemical Name:** sodium 2-(4-((R)-2-(((S)-2-(3-chlorophenyl)-2-hydroxyethyl)amino)propyl)phenoxy)acetate  
**Canonical SMILES:** ClC1=CC([C@@H](CN[C@H](C)CC(C=C2)=CC=C2OCC([O-])=O)O)=CC=C1.[Na+]  
**Solubility:** Soluble to 100 mM in sterile water  
**Storage:** Store at RT  
**General tips:** For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.  
**Shopping Condition:** Evaluation sample solution: ship with blue ice  
All other available size: ship with RT, or blue ice upon request

### Biological Activity

**Targets:** GPCR/G protein  
**Pathways:** Adrenergic Receptor  
**Description:**  
BRL 37344, sodium salt is a potent and selective agonist of β3 adrenoceptor with Ki values of 287, 1750 and 1120 nM for β3, β1 and β2 receptors, respectively [1].  
β3 adrenoceptor is exists mainly in adipose tissue and plays an important role in the regulation of thermogenesis and lipolysis.
BRL 37344, sodium salt is a potent and selective β3 adrenoceptor agonist. In isolated rat brown and white adipocytes, BRL 37344 significantly stimulated lipolysis with EC50 values of 5 and 56 nM in brown adipocytes and white adipocytes, respectively [1]. In the isolated guinea pig heart, BRL 37344 (10-8-10-5 M) increased heart contractility (dP/dt) and coronary flow (CF). However, BRL 37344 (10-8 M) completely inhibited isoprenaline-induced increase in contractility, which suggested that BRL 37344 display β1-antagonistic properties [2].

In fasted rabbits, BRL 37344 significantly increased plasma nonesterified fatty acids (NEFA) levels through β3-adrenoceptor. However, BRL 37344 had no effect on plasma glucose levels [3]. In mice, BRL 37344 increased circulating transaminase levels through activation of β3-adrenoceptor [4].

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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